

Applicants: Adler et al.

Serial No.: Unknown (Parent: 09/636,399)

Docket No.: 97-44D1

For: NOVEL BETA-DEFENSINS

Provisional Applications 60/058,335, filed on September 10, 1997 and 60/064,294, filed on November 5, 1997, all of which are herein incorporated by reference. Under 35 U.S.C. §119(e)(1), this application claims benefit of said Provisional Applications.

Please replace the paragraph beginning at page 3, line 36, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate changes made.

Within one aspect the invention provides an isolated protein comprising a polypeptide that is at least 80% identical to a polypeptide selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 65 of SEQ ID NO:2; b) a polypeptide having the sequence of amino acid residue 19 to amino acid residue 65 of SEQ ID NO:2; c) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 65 of SEQ ID NO:2; d) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; e) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and f) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:10; wherein the polypeptide has cysteine residues corresponding to amino acid residues 33, 40, 45, 55, 62 and 63 of SEQ ID NOs:2 or 10. Within one embodiment the protein comprises a polypeptide having the sequence selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; b) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and c) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:10.

Please replace the paragraph beginning at page 5, line 14, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate changes made.

Within another aspect is provided an isolated polynucleotide molecule encoding a protein, the polynucleotide molecule consisting of a coding strand and a

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complementary non-coding strand, wherein the polynucleotide molecule encodes a polypeptide that is at least 80% identical to the amino acid sequence to a polypeptide selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 65 of SEQ ID NO:2; b) a polypeptide having the sequence of amino acid residue 19 to amino acid residue 65 of SEQ ID NO:2; c) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 65 of SEQ ID NO:2; d) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; e) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and f) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:10; wherein the polypeptide has cysteine residues corresponding to amino acid residues 33, 40, 45, 55, 62 and 63 of SEQ ID NOs:2 or 10.

Please replace the paragraph beginning at page 74, line 28, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate changes made.

A 45 amino acid residue zamp1 peptide (residues 23 to 67 of SEQ ID NO:10) was synthesized by solid phase peptide synthesis using a model 431A Peptide Synthesizer (Applied Biosystems/Perkin Elmer, Foster City, CA). Fmoc-Lysine(Boc) resin (0.52 mmol/g; Anaspec Inc., San Jose, CA) was used as the initial support resin. 1 mmol Amino acid cartridges (Anaspec Inc., San Jose, CA and Applied Biosystems/Perkin Elmer, Foster City, CA) were used for synthesis. 2-(1-H-benzotriazol-1-yl)-1,1,3,3-tetramethyluroniumhexafluorophosphate (HBTU), 1-Hydroxy-benzotriazole (HOBt), 2 M N,N-Diisopropylethylamine, N-Methylpyrrolidone, Dichloromethane (all from Applied Biosystems/Perkin Elmer, Foster City, CA), along with piperidine (Aldrich Chemical Co., St. Louis, MO) and 0.5 M acetic anhydride capping solution (Advanced ChemTech, Louisville, KY), were used as synthesis reagents.